## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

1. (Currently Amended) A broadcast service method of a mobile communication system comprising:

forming an SDU (Service Data Unit) without adding a header in a BMC (Broadcast/Multicast Control) layer;

transmitting the SDU to a terminal, the transmitted SDU including a list of a plurality of channels;

checking an input of a broadcast service key signal by a user and reading system information transmitted from a base station (Node B), calculating an IMSI (International Mobile Subscriber Identity) value and selecting a corresponding channel from the list of the plurality of channels based on the calculated IMSI value; and

reading a CTCH (Common Traffic Channel) indicator, configuring lower layers, and reading data received in the terminal, said reading a the CTCH indicator being performed by an RRC (Radio Resource Control) of the terminal.

- 2. (Original) The method of claim 1, wherein the system information is transmitted by an SIB5 (System Information Block 5) or an SIB6 (System Information Block 6) of the terminal.
- 3. (Currently Amended) The method of claim 1, wherein <u>calculating the IMSI value</u> includes modular-calculating the IMSI (International Mobile Subscriber Identity) value is modular-calculated.
- 4. (Currently Amended) The method of claim 1, wherein the channel selected by calculating based on the calculated IMSI value is a S-CCPCH (Secondary Common Control Physical Channel).
- 5. (Currently Amended) The method of claim 1, wherein selecting a—the corresponding channel by calculating based on the calculated IMSI value is performed to obtain an index of a secondary common control physical channel (S-CCPCH) that each terminal of a plurality of terminals may have, and the terminals are divided into N number of groups.
- 6. (Original) The method of claim 5, wherein each terminal of the N number of groups selects a channel by setting the index of selected S-CCPCH to be equal to IMSI mod K,

and K is the number of S-CCPCHs mapped to CTCHs.

7. (Currently Amended) The method of claim 1, wherein the lower layers comprise

wherein IMSI is an international mobile subscriber identity value, mod is the modular operator,

at least one of a CTCH, a fast access channel (FACH) and a S-CCPCH.

8. (Original) The method of claim 7, wherein the CTCH and the FACH are one-to-

one mapped to each other, and a different logical channel is not mapped to the FACH to which

the CTCH is mapped.

9. (Original) The method of claim 7, wherein the FACH and the S-CCPCH are one-

to-one mapped to each other, and a PCH (Physical Channel) is not mapped to the S-CCPCH to

which the FACH is mapped.

10. (Currently Amended) The method of claim 1, wherein the reading the received

data is performed without using a DRX (Discontinuous Reception) method.

Docket No. P-0598

11. (Currently Amended) A method for providing a broadcast service in a communication system, comprising:

forming a service data unit by attaching a radio link control header to user data;

transmitting the service data unit to at least one terminal without attaching a header in a broadcast/multicast control layer;

reading system information transmitted from a base station;

calculating an international mobile subscriber identity value; and

selecting a corresponding channel based on the calculated international mobile

subscriber identity value.

- 12. (Currently Amended) The method of claim 11, further comprising: checking an input of a broadcast service key signal; reading system information transmitted from a base station; calculating an international mobile subscriber identity value; and selecting a corresponding channel.
- 13. (Original) The method of claim 11, further comprising: reading a common traffic channel indicator; configuring lower layer channels; and

reading data received in the terminal, said reading a-the common traffic channel indicator being performed by a radio resource control of the terminal.

## 14. (Canceled)

- 15. (Currently Amended) The method of claim [[12]]11, wherein the system information is transmitted by a system information block 5 (SIB5) or an system information block 6 (SIB6) of the terminal.
- 16. (Currently Amended) The method of claim [[12]]11, wherein <u>calculating</u> the international mobile subscriber identity value is <u>modular-calculated includes modular-calculating</u> the international mobile subscriber identity value.
- 17. (Currently Amended) The method of claim [[12]]11, wherein the channel selected by calculating based on the calculated international mobile subscriber identity value is a secondary common control physical channel (S-CCPCH).
- 18. (Currently Amended) The method of claim [[12]]11, wherein selecting a the corresponding channel by calculating the international mobile subscriber identity value is performed to obtain includes obtaining an index of a secondary common control physical

channel that each terminal of a plurality of terminals may have, said plurality of terminals divided into N groups.

19. (Currently Amended) The method of claim 18, wherein each terminal of the N groups selects a channel by setting the index of the selected secondary common control physical channel to be equal to:

(international mobile subscriber identity) mod K

where mod is the modular operator and K is the number of selected secondary common control physical channels mapped to common traffic channels.

- 20. (Original) The method of claim 13, wherein the lower layer channels comprise at least one of a common traffic channel, a fast access channel, and a secondary common control physical channel.
- 21. (Original) The method of claim 14, wherein the lower layer channels comprise at least one of a common traffic channel, a fast access channel, and a secondary common control physical channel.
- 22. (Currently Amended) The method of <u>claims-claim</u> 20, wherein the common traffic channel and the fast access channel are one-to-one mapped to each other, and a different

Reply to Office Action dated February 8, 2007

logical channel is not mapped to the fast access channel to which the common traffic channel is mapped.

- 23. (Currently Amended) The method of <u>claims-claim</u> 20, wherein the fast access channel and the secondary common control physical channel are one-to-one mapped to each other, and a physical channel is not mapped to the secondary common control physical channel to which the fast access channel is mapped.
- 24. (Currently Amended) The method of claims claim 13, wherein said reading data said received data in the terminal is performed without using a discontinuous reception method.
- 25. (Currently Amended) A broadcast service method of a mobile communication system, comprising:

forming a service data unit;

transmitting said service data unit to a terminal;

checking an input of a broadcast service key signal of a user;

reading system information transmitted from a base station;

calculating an international mobile subscriber identity value and selecting a corresponding channel based on the calculated international mobile subscriber identity value;

reading a common traffic channel indicator;

configuring lower layer channels; and reading all of the data received in said terminal.

- 26. (Original) The method of claim 25, wherein the system information is transmitted by a system information block 5 (SIB5) or a system information block 6 (SIB6) of said terminal.
- 27. (Currently Amended) The method of claim 25, wherein <u>calculating</u> the international mobile subscriber identity value <u>is modular-calculated includes modular-calculating</u> the international mobile subscriber identity.
- 28. (Original) The method of claim 25, wherein said selected channel is a secondary common control physical channel.
- 29. (Currently Amended) The method of claim 25, wherein the selecting step-is performed to obtain an index of a secondary common control physical channel that each terminal of a plurality of terminals may have, said plurality of terminals divided into N groups.

30. (Currently Amended) The method of claim 29, wherein each terminal of the N groups selects a channel by setting the index of the selected secondary common control physical channel to be equal to:

(international mobile subscriber identity) mod K

where mod is the modular operator and K is the number of selected secondary common control physical channels mapped to common traffic channels.

- 31. (Original) The method of claim 25, wherein said lower layer channels comprise at least one of a common traffic channel, a fast access channel, and a secondary common control physical channel.
- 32. (Original) The method of claim 31, wherein the common traffic channel and the fast access channel are one-to-one mapped to each other, and a different logical channel is not mapped to the fast access channel to which the common traffic channel is mapped.
- 33. (Original) The method of claim 31, wherein the fast access channel and the secondary common control physical channel are one-to-one mapped to each other, and a physical channel is not mapped to the secondary common control physical channel to which the fast access channel is mapped.

Docket No. P-0598

34. (Currently Amended) The method of claim 25, wherein said reading all of the data step-does not use a discontinuous reception method.